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PROCEEDINGS

OF

THE ROYAL GEOGRAPHICAL SOCIETY OF LONDON.

SESSION 1859-60.

Fourth Meeting, Monday, January 9th, 1860.

THE EARL DE GREY AND RIPON, PRESIDENT, in the Chair.

Presentations.—Captain G. A. Bedford, R.N.; Richard Cull; John P. Gassiot, jun.; G. Gilbert-Heard; and Lieut. A. W. Twyford, Esqrs., were presented upon their election.

ELECTIONS.—Sir Andrew Agnew, Bart., M.P.; Captain Claude Clerk; the Hon. W. H. Forester Denison, M.P.; Captain J. Hamilton Ward, R.N.; Edward Enfield; H. Hamilton Lindsay; C. Otter; and J. Petherick, Esqrs., were elected Fellows.

Accessions.—Among the accessions to the Library and Map Rooms since the former meeting were a copy of Purchas' 'Pilgrimes,' in 5 vols., presented by John Crawfurd, Esq., F.R.G.S.; map, with views and sections, of the Kaukasus and adjoining provinces, with book explanatory of the survey (in Russian), by the Chevalier de Baer, Hon. F.R.G.S.

The Paper read was—

Journey up the White Nile to the Equator, and Travels in the Interior of Africa, in the years 1857-58. By J. Petherick, Esq., f.r.g.s., H.M.'s Consul at Khartum.

Mr. Petherick's first expedition was in 1853, to the extreme confines of the Bahr el Ghazal, where his negro attendants refused to proceed farther, and compelled him to return.

The next year he took an armed force in two boats, and landed where he had before turned back, and pushed overland into the Djour country. There he left 25 men to form a trading establishment.

Each succeeding year similar advances were made, and new trading posts were founded.

VOL. IV.

On the 27th of December, 1857, Mr. Petherick sailed from Khartum on his last and most important expedition. He started with two boats, the one a large three-sailed dahabyeh, and took with him about 80 men in all. He had previously dispatched 20 men in a third boat to await him at the Bahr el Ghazal.

He reached this lake in 11 days from Khartum. The White Nile, on leaving it, was only 40 yards wide, 15 to 20 feet deep, and running at ½ mile an hour. The lake is a large sheet of water, estimated by Mr. Petherick at about 180 miles in length, overgrown with reeds and lilies, and full of hippopotami, that are even dangerous to boats from their fierceness. The waters of the lake are contributed by many rivulets and by a river running from the south-west, which is prevented only by the masses of reeds that choke it, from affording a navigable highway to the far interior.

Mr. Petherick skirted the northern shore of the Bahr el Ghazal. It was covered with coarse rank grass, and was apparently uninhabited. The expedition anchored at an island at the extreme end of the lake, where he formed a depôt. From this point Mr. Petherick proceeded direct to the southward, with a strong native escort, well armed, and carrying beads and other articles of barter.

The first seven days' march from the lake, lay through strictly pastoral tribes. South of these the tset-se fly appeared, and the natives were wholly agricultural. There was difficulty in travelling among them, as it was impossible to engage porters for greater distances than single days' marches and from village to village.

Twenty-six days of actual travel, from the lake, brought Mr. Petherick to the Niam Niam tribe of cannibals. These people use iron boomerangs, just as the natives of Australia use wooden ones. Here the rains commence in February and last to the end of October.

This was Mr. Petherick's farthest point, whence, after a successful barter for ivory, he returned and reached his boats in safety.

The difficulties and danger of travel in these parts, are brought out in strong relief by the incidents of the personal narrative, contained in Mr. Petherick's paper.

The President was sure he should express not only his own feelings, but those of the meeting also, when he said that they were very much indebted to Mr. Consul Petherick for the very interesting paper which he had just read. It was marked by that spirit of commercial enterprise which was peculiarly the characteristic of our country, and from which undoubtedly the Society had upon so many occasions derived the greatest advantage. It was curious that as their attention had recently been directed to a neighbouring portion of the Continent of Africa, they should now have Mr. Petherick coming among them to read a paper which might be said to form almost the necessary complement to those which, during the last Session, had been communicated to them by Captains Burton and Speke. They might fairly hope now that by

the efforts of their countrymen, one proceeding from the north to the south, and the other from the south-east to the north-west, the course of that great river, so remarkable in an historical and a geographical point of view, the Nile, might, at no distant period, be traced out and satisfactorily established by the investigations of Englishmen in connexion with this Society. He was very happy to be able to announce that Her Majesty's Government had been pleased to grant to the Society, in support of Captain Speke's intended expedition, the sum of 2500l. This amount had been awarded in a manner that must be most satisfactory to the Society, because it had been handed over to the Council to be expended entirely at their own discretion. While Captain Speke then would proceed to finish the explorations that were begun in his previous expedition under Captain Burton, he trusted that Mr. Petherick would continue in an opposite direction those of which he had just given some account, and he hoped the time might not be far distant when these two distinguished explorers might meet and greet each other, arriving from different directions, on the banks of the White Nile. He was glad to avail himself of this opportunity to express the hope that Her Majesty's Consul in those parts might receive from Government that support to which they, as geographers, must feel that he was fully entitled.

CAPTAIN J. H. SPEKE, F.R.G.S., could not say positively that any decided relation existed between the Bahr-el-Ghazal and the Victoria Nyanza.

All the branches of the Upper Nile appeared to him to have their heads directed south-easterly, tending towards the Nyanza, but more especially so the Bahr-el-Ghazal from the position in 4° N. lat. where Mr. Petherick crossed it.

The granitic hills which Mr. Petherick here sees out-cropping to an altitude of 2000 feet above the level of the northern country, might be a continuation of the same description of hills we hear of at Gondokoro, on the White Nile, also in 40 N. lat. If this were the case, it was evident the whole country has, thence northward to the Mediterranean, an evenly declining slope from 2000 feet to the sea-level. Of this fact the analogous descriptions of the sluggish nature of the two great streams in a measure bear proof.

These hills appeared to form a kind of steppe in the country, and act as a support to the great interior plateau, which is about 4000 feet above the sea, as was determined by him on discovering the Nyanza, which is at that altitude, and lies about 200 miles or so to the immediate southward of the range. As these two streams, the Bahr-el-Ghazal and Bahr-el-Abiad, have both been seen to intersect this range, and as a third large river, called Lout or Modj, which, as well as the former two, comes from the direction of the Lake, it would be a pure matter of speculation to say which of the three may drain the Nyanza. Indeed until some one goes there to examine the country nothing could be determined.

From the relative position of the Lake to these streams, as well as the general character and appearance of the Lake itself, Captain Speke was still of the conviction that it will eventually prove to be the principal source of the Nile.

SIR RODERICK MURCHISON, V.P.R.G.S., congratulated the Society upon the value of the communication made that evening. The President had very properly called their attention to the great object of all the African explorations, particularly those concerning the sources of the Nile, with which the Geographical Society had been occupied for several years. He believed that civilization could only be introduced into Africa by showing to its inhabitants that we were anxious to deal with them fairly and equitably. Dr. Livingstone had often told him that the first step to be taken in civilizing the African was to barter fairly with him, and teach him that he could gain much by attaching himself to an honest Englishman.

Mr. Petherick had not adverted to several topics on which he (Sir R.) might have said a few words. In one portion of his travels Mr. Petherick had collected various minerals and ores; and though the region of Africa which he had traversed was not occupied by those ancient rocks which, for the most part, furnish gold and other minerals of importance, still in one of these regions he had collected masses of clay which, having been analysed by Dr. Percy of the Government School of Mines, had proved to contain a considerable portion of gold ore, and he hoped his friend Mr. Petherick might be the first to profit by it. In conclusion he heartily hoped that the scheme of developing the true source of the White Nile, which they had in hand, might be so accomplished that we should be the first people who really discovered the sources of the great historical river. Whether those sources rise farther to the west than the great Lake Nyanza which Captain Speke had discovered, or whether the main source was, as is most probable, that lake itself, he was quite sure that by the new co-operating expeditions which were designed by the Geographical Society, and which he hoped the Government would assist, the discovery would greatly redound to the honour of the nation, and would largely advance geographical knowledge.

COLONEL SYKES, V.P.R.G.S., said the Society had to thank Mr. Petherick for the extremely frank and candid manner in which he had told them what they might and what they might not rely upon in his narrative. regard to localities, longitudes, latitudes, and the elevation of the country, he stated that he had no means of determining them accurately by the aid of scientific instruments, consequently the western course he had given to the Nile might, in fact, be much more to the eastward, and approximate more to the Lake Nyanza, discovered by Captain Speke, than Mr. Petherick had supposed. They were also indebted to Mr. Petherick for the politic and humane lesson he had brought to their notice, and which might be useful elsewhere than in the centre of Africa, namely, that in attempting intercourse with any people whatever, our object should be to convince them in an amicable way that the intercourse was for their own interest as much as for ours, and then we should be sure to gain their good-will, and to have their efficient and useful services. But that intercourse which was gained by force of arms could only in general be maintained by force of arms. Captain Speke stated that the southern end of the Lake he discovered, Nyanza, was in about 24 degrees south latitude, and that he supposed it extended to two or three degrees to the north of the Equator. But as he had only the information of natives who had not definite ideas of distance, it might or might not be true; it might terminate on the Equator—indeed it might terminate in those gravelly ramifications of the Nile which a French traveller, on a former expedition, found in 4° north latitude, where the river worked into a great number of small channels extending over a very wide surface, possibly communicating with the reedy lake that Mr. Petherick mentioned, where he quitted the river altogether and then travelled to the southward by land. He was much disposed to think that the elevation of the country north of the Equator which Captain Speke spoke of as being only 2000 feet, would be found to be much higher than that, as the structure of the country did not seem to indicate at all a trap district, or descent by steps or terraces from the height of Lake Nyanza (4000 feet). He concurred rather with Mr. Petherick in supposing that there would be a gradual ascent of the country up to the Equator. On the whole he entertained great hopes that when Mr. Petherick and Captain Speke renewed their travels, they would meet and embrace each other on the Equator, coming from opposite directions, and that they would then find that Mr. Petherick's reedy lake on the Nile and Lake Nyanza had a direct communication with each other.

Mr. Consul Hanson (a native of Africa) thought it must have occurred to

everybody that the result developed by the explorations of the two gentlemen who had addressed them, as well as by Dr. Livingstone in his most interesting researches, showed that, instead of the interior of Africa being, as was supposed of old, an uninhabited desert, wherever we went we should find not only vegetation and productiveness, but a teeming population. This perhaps was the great hope with those who had a right to be interested in the future of Africa; and it must be a great encouragement to the Geographical Society that as commerce. cultivation, and Christianity were not only the hope of Africa, but also the elements of a well ordered civilization everywhere, so there was encouragement for those who went forth to discover the resources and capabilities of the country, that they would not be exposed to any sufferings from want, that the populations to which they went were prepared to appreciate the endeavours which they should make for their advancement, and were ready to meet them in the exchange of the commodities which they might mutually have to offer. It struck him that we might have known at this day much more of Africa than we did now. It certainly had not been the fault of Englishmen that we had not known more; he believed it had been the fault of his own countrymen. They knew something of the history of the colony of Sierra Leone; it had been his lot to be located in the neighbourhood of that colony. Some eighteen years ago it was his honour to be sent by the British Government to the Gold Coast, and subsequently to the Republic of Liberia; and now he had recently returned from the Sherboro country, which was very near Sierra He had been surprised, and even pained, to find that the part of Africa of which we ought to know the most, was the very part of which we knew the least. If they examined any of the charts of the coast to the southward of the colony of Sierra Leone, they would observe that within 120 miles of Freetown (the capital of the colony) there was nothing at all, no indication on the face of any of these charts, to show that beyond 3 miles from the coast anything whatever was known of the country. There were two charts of the Sherboro River. He believed the name was a misnomer; it was not a river, it was a lagoon, which seemed to have been formed by the joint action or rush of waters from four or five considerable rivers that came from the interior and the ocean, throwing up a deposit conjointly. As a proof that it was not a river he might mention that it had two tidal flows: the water ebbed and flowed both ways, and, of course, it could not be a river. But what he meant to say was, that upon the chart of the Sherboro River there was an indication of the embouchure of four other large rivers, but nothing whatever was known of them, and they were all marked down as being unsurveyed. He regretted exceedingly that the character of the duties which he had to perform there prevented his travelling, or making any explorations in the interior; but occasionally it became his duty to go up these rivers in the course of service, and he found, as he went up, that in proportion as he got away from the coast, -in the same proportion did he get away from the malaria district, and get into a healthy climate. He found, as a general rule. that the mangrove belt which skirted the coast might be 20 or 25 miles in extent; beyond that, the traveller began to ascend, and to get into comparatively higher land, beyond the malaria influences. Another fact that had occurred to him was, that the growth of mangrove seemed to be caused by the confluence of fresh and sea water. Where there was fresh water they saw no mangrove, but where the fresh water met the sea there the mangrove grew, and where the mangrove throve, there you had that peculiar malaria which generated the fevers of the west coast. The great hope of England with reference to Africa was, if possible, to discover some source of supply of cotton for the manufacturing districts of this country. They would observe that Dr. Livingstone stated that in his quarter of Africa he found indigenous cotton growing

in the country without cultivation on the part of the people; they found that the missionaries in Abeokuta, going up the valley of the Niger, observed the same thing; and Mr. Petherick going down the White Nile, from the northward, found the people there growing and manufacturing cotton. And on the Gold Coast very large communities of people were engaged in the production of this article. In the quarter which he had visited he ventured to say that cotton was not only abundant in quantity, but excellent in quality. He found in the country immediately to the interior of Sherboro, that cotton was the great staple article of production; the people there were in the habit of producing and manufacturing it, and the cloths which they manufactured were precisely the same quality as those which we found from the accounts of missionaries up the Niger, and were highly valued by the people. The future of Africa, to which the attention of the scientific world was now directed, might be of more importance in its results and consequences than we could foresee at present. He believed himself that if the slave-trade was ever to be suppressed, if England was ever to derive any advantage from the great sacrifices which she had made in behalf of Africa, it was not so much by means of keeping naval squadrons upon the coast in order to intercept the slave ships, as it was by introducing civilization, by teaching the people how to profit by their labour and make it of value to the civilized world, so that it should be felt that inasmuch as mankind were all of one

family, it was only fair to "let kind offices go round."

MR. PETHERICK, in reply to a question, said that the boomerang used by the natives to the most southern point he reached was the same as that used in Australia. When thrown forward it would return to the hand. It was made of iron, was about 15 inches in diameter, and curved.

The President, in adjourning the meeting, was confident that he might, without fear, congratulate them upon the result of the discussion. It concerned a topic in which, at the present moment, our interest was deeply excited; and we had, he thought, derived very great and valuable information from the Paper which had been read, and the observations to which it had given rise. Among them he thought none had been on every account more interesting than those which had been addressed with so much eloquence and feeling by Mr. Hanson, on behalf, so to speak, of his own fellow countrymen.

Fifth Meeting, Monday, January 23rd, 1860.

SIR RODERICK I. MURCHISON, VICE-PRESIDENT, in the Chair.

Presentations.—Edward Butler; F. B. Montgomerie; and Charles Otter, Esqrs., were presented upon their election.

ELECTIONS.—The Rev. Thomas Butler; the Rev. Thomas F. Crosse, D.C.L.; the Rev. C. S. A. Dickinson; the Hon. H. Courtenay Forbes; the Hon. A. Gordon; Lieut. W. Murray; the Rev. J. Ouvry North; Major H. A. Sarel; Capt. A. E. Wilkinson, B.A.; and John Boustead; C. W. Franks; B. Hennessey; G. H. Inskip, R.N.; William Lake; Thomas Molson, of Montreal; Chas. H. C. Plowden; Henry Rich, M.P.; John D. Trigg; and Frederick Verbeke, Esqrs., wer elected Fellows.